DOCUMENT RESUME

ED 117 499 CE 006 170

AUTHOR Small, Charles; And Others
TITLE [Arizona] Field Test Report. Vol. 12. Construction Industry Related Math. 1974-75.
INSTITUTION Mesa Public Schools, Ariz. Dept. of Research and Evaluation.
SPONS AGENCY Arizona State Dept. of Education, Phoenix.
PUB DATE Jun 75
NOTE 48p.; For related documents, see CE 006 159-170; For unit evaluated, see CE 004 725

EDRS PRICE MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS Career Awareness; *Career Education; *Construction Industry; *Curriculum Evaluation; Evaluation Methods; Grade 7; Job Skills; Junior High Schools; *Mathematics Instruction; *Program Attitudes; Questionnaires; Tables (Data); Unit Plan
IDENTIFIERS Arizona; *Field Testing

ABSTRACT

The field test report on the "Construction Industry Related Math" instructional unit for grade 7 is one of a series of reports on the Arizona developed Career Education Curriculum Units. Presented is specific information as to the success of the units in terms of the learner's cognitive, affective, and psychomotor behavior according to expressed performance and behavioral objectives. Cognitive and student and teacher attitudinal data were collected from six sites and projects in Arizona. Following the introduction, a brief description of the unit is given. The body of the document presents and discusses various tables showing field test results in the following areas: (1) information describing the field test, including demographic characteristics of both participating teachers and learners, (2) attitudinal data from both teachers and learners concerning the unit, (3) learner performance data on the lessons' specific items, and (4) teacher recruitment, refinement data, analysis, and comments. Four brief conclusions and recommendations are included. The document concludes with two appendixes: statistics and tabular data on student and teacher attitudes and a sample of the field test instrument package--UNIVAL (forms and questionnaires on student and teacher attitudes and student performance). (Author/BP)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED117499

ARIZONA RESEARCH COORDINATING UNIT
1535 WEST JEFFERSON
PHOENIX, ARIZONA 85007

FIELD TEST REPORT
Vol. 12

CONSTRUCTION INDUSTRY RELATED MATH

Charles Small
Frank L. Vicino
Don Peterson
James S. DeGracie

ONE OF A SERIES IN THE
ARIZONA STATEWIDE FIELD TEST 1974-75

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Conducted by
THE DEPARTMENT OF RESEARCH AND EVALUATION
Mesa Public Schools

Dr. George N. Smith
Superintendent

Dr. James K. Zaharis
Assistant Superintendent
Educational Services

for
THE ARIZONA STATE DEPARTMENT OF EDUCATION

Carolyn Warner, Superintendent
Arizona Department of Education

Eugene L. Dorr
Associate Superintendent for
Career Education

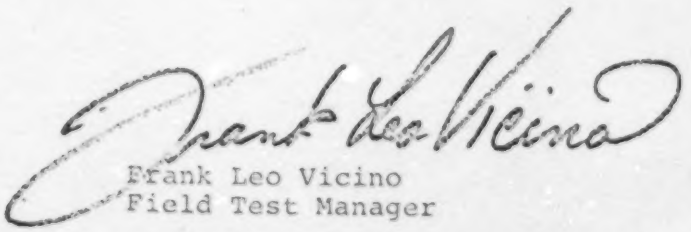
OE 006 170

Coconino
Yavapai
WACOP
Roosevelt
Central Maricopa
Mesa
Pinal
Tri-
County
Pima

FOREWORD

So many have contributed major input to the field test processes of unit delivery, monitoring and instrument completion, that it is impossible to extract, note, and applaud individual efforts. I am sure that all those involved in this major team effort can see how much has been accomplished and have a positive view of its educational significance for the young people of Arizona. By documenting and analyzing the capabilities of the career education units tested, we all have contributed a positive boost to career education in school districts across the state.

The task of Field Test Manager has been simplified considerably by excellent staff support from the Mesa Public Schools Department of Research and Evaluation, responsive assistance from the State Department of Education, and the effective management shown by the field test coordinators from the respective field test projects.



Frank Leo Vicino
Field Test Manager

June, 1975

STATEWIDE FIELD TEST TASK FORCE

State Department of Education
Dr. Beverly Wheeler, Director, Research Coordinating Unit

Mesa Public Schools, Department of Research and Evaluation
Frank Leo Vicino, Director, Evaluation
Dr. James S. DeGracie, Director, Research
Don Peterson, Research Associate
Charles Small, Research Associate
Julie Lindholm, Research Associate

Site Field Test Coordinators

Robert D. Stanton, WACOP
Marilyn Young, Pinal
Stephen McKibben, Tri-County
Bea Langley, Coconino
George O'Reilly, Coconino
Jerry O'Brien, Coconino
Jean E. VanWinkle, Yavapai
Sandra McCarthy, Roosevelt
Charles Small, Mesa
Jean Williamsen, Pima
Jim Harrison, Central Maricopa

Northern Arizona State University
Dr. Sam W. Bliss, Director
Educational Resources Management Center
Data Reduction

PREFACE

This is one of a series of field test reports on Arizona developed Career Education Curriculum Units. This report presents unit specific field test material. Another report in this series contains information concerning overall field test rationale and compilation of results for all field tested units.

The work presented and reported herein was performed pursuant to contract from the Arizona State Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the Arizona State Department of Education and no official endorsement by the Arizona State Department of Education should be inferred.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
UNIT DESCRIPTION	3
FIELD TEST RESULTS	4
Description of Participants	5
Attitudinal Data	7
Learner Performance	13
Teacher Refinement, Analysis and Comments	22
SUMMARY	24
CONCLUSIONS AND RECOMMENDATIONS	26
APPENDIX I -- Additional Data	
APPENDIX II -- UNIVAL	

INTRODUCTION

The major purpose of most innovative programs such as career education is to affect positively learners' cognitive, affective, and psychomotor behavior according to expressed performance and behavioral objectives. The present field test of career education curriculum units is designed to examine the success of the unit in terms of the above. Cognitive and attitudinal data have been collected from sites and projects across the state of Arizona. The following projects were involved in the effort of field testing the units: Central Maricopa, Coconino, Mesa, Pima, Pinal, Roosevelt, Tri-County, WACOP, and Yavapai.

Data on the present unit, however, have been collected from the following sites:

Project	Classrooms Requested	Classrooms Used In Analysis*
Coconino	4	1
Mesa	1	0
Pinal	4	3
Roosevelt	3	3
Tri-County	3	3
Yavapai	3	0
Total	18	10

*Data received in time for analysis.

Significant statistics are presented and discussed in the Field Test Results section of this report. Other statistics and tabular data are presented in Appendix I of this report.

UNIT DESCRIPTION

CONSTRUCTION INDUSTRY RELATED MATH

Grade 7: Construction Industry Related Mathematics

This unit is intended to familiarize students with various facets of the construction industry, including the various occupations available and the skills and training necessary to pursue an occupation in the industry. The final set of activities of the unit gives students an opportunity to plan a house and to compute the approximate cost of their "dream house." Opportunity is also provided for the students to work with various construction industry related mathematics problems.

FIELD TEST RESULTS

CONSTRUCTION INDUSTRY RELATED MATH

This section of the report presents the data summary and analysis for the field test of the curriculum unit. An outline of this section follows:

A. A description of the field test including demographic characteristics of both participating teachers and learners.

B. Attitudinal data from both teachers and learners concerning the unit.

C. Learner performance data on the lesson specific items.

D. Teacher refinement data, analysis and comments.

DESCRIPTION OF THE PARTICIPANTS

The data in this report was obtained from the projects, teachers, and learners described in the following tables.

1. Learners

   Table I presents demographic information on the learners that were exposed to the unit in the field test. Examining Table I, it can be seen that the male and female learners are fairly evenly represented. There was strong representation by the minority groups. Out of 402 learners, 50% (199) were from minority backgrounds: 34% (138) Spanish Surname, 8% (31) Black, 7% (28) American Indian, and 0.5% (2) Other.

2. Teachers

   Table II presents the total number and selected demographic characteristics of the teachers presenting the unit.

   It can be noted from Table II that 8 of the 10 teachers that taught this unit were male. This can best be explained by the fact that this is basically an industrial arts unit.

TABLE I

NUMBER OF LEARNERS EXPOSED BY
SELECTED DEMOGRAPHIC CHARACTERISTICS

	SEX		ETHNIC COMPOSITION					
PROJECT	MALE	FEMALE	AMERICAN INDIAN	BLACK	SPANISH SURNAME	ANGLO WHITE	OTHER	TOTAL NUMBER
Coconino	14	15	27	0	0	1	1	29
Pinal	103	29	0	6	57	69	0	132
Roosevelt	49	67	0	24	61	30	1	116
Tri-County	49	76	1	1	20	203	0	125
Total	215	187	28	31	138	203	2	402
Percent	53	46	7	8	34	50	0.5	

The median years of experience for this group falls between 1-5 years. It should be noted that this group of teachers was quite sophisticated concerning career education. Nine of the teachers were familiar with career education; four had previously taught a career education unit or program and one had developed a career education unit or program.

ATTITUDINAL DATA

1. Teacher Attitude

Included in each UNIVAL (Unit Evaluation Instrument) was an Instructor Attitudinal Data Sheet which asked two questions concerning attitudes toward career education in general and three questions concerning the teacher's attitude toward the unit (see Appendix II).

a. Teacher Attitude Toward Career Education

Examining the teachers' general attitude toward career education (Table III) it can be seen that the mean response across questions and projects is a very high 4.20, on a scale where 5 is the highest positive response. Of the 20 possible responses, 18 (90%) are positive toward career education, and only 2 (10%) negative.

TABLE II

NUMBER OF INSTRUCTORS BY SELECTED
DEMOGRAPHIC CHARACTERISTICS

	SEX		YEARS OF EXPERIENCE					CAREER EDUCATION EXPERIENCE				
PROJECT	MALE	FEMALE	LESS THAN 1	1-5	6-10	11-15	MORE THAN 15 YRS.	DEV'D. C. ED. UNIT OR PROGRAM	TAUGHT C. ED. UNIT OR PROGRAM	READ A C. ED. UNIT OR PROGRAM	FAMILIAR WITH CAREER ED.	HAD NO EXPOS. TO C. ED.
Coconino	1	0	0	1	0	0	0	0	0	0	1	0
Pinal	3	0	0	2	1	0	0	1	1	0	1	0
Roosevelt	2	1	0	1	1	0	1	0	2	1	0	0
Tri-County	2	1	0	1	0	1	1	0	1	0	1	1
Total	8	2	0	5	2	1	2	1	4	1	3	1

TABLE III

TEACHER ATTITUDE TOWARD CAREER EDUCATION
(Number, Percent and Mean of Instructor Responses
to Attitude Items 1 and 2 Combined)

PROJECT	STRONGLY POSITIVE N	%	POSITIVE N	%	NO OPINION N	%	NEGATIVE N	%	STRONGLY NEGATIVE N	%	MEAN
Coconino	0	0	2	100	0	0	0	0	0	0	4.00
Pinal	2	33	2	33	0	0	0	0	0	0	3.67
Roosevelt	5	83	1	17	0	0	2	33	0	0	4.83
Tri-County	1	17	9	83	0	0	0	0	0	0	4.17
Total	8	40	10	50	0	0	2	10	0	0	4.20

b. Teacher Attitude Toward the Unit

Table IV summarizes the teacher attitudes toward the unit.

The teachers' high positive attitude toward career education seems to have carried over very little to the teachers' attitude toward the unit. The teachers show a slightly 3.37 positive attitude toward the unit. Of the possible 30 responses, 19(63%) are positive, 3 (10%) are of no opinion, and 8 (27%) negative.

Correlations between the Teacher Attitude toward career education and Teacher Attitude toward the unit were not significant (Appendix I).

2. Learner Attitude

When Learner Attitude toward the unit is examined (Table V), we see a moderately positive feeling toward the unit across all projects. Of the 1856 responses 53% were positive toward the unit, 33% no opinion, and 14% were negative toward the unit.

Correlations between the Teacher Attitude toward the unit and Learner Attitude were not significant (Appendix I).

TABLE IV

TEACHER ATTITUDE TOWARD UNIT
(Number, Percent and Mean of Instructor Responses
To Attitude Items 3, 4 and 5 Combined)

PROJECT	STRONGLY POSITIVE N	%	POSITIVE N	%	NO OPINION N	%	NEGATIVE N	%	STRONGLY NEGATIVE N	%	MEAN
Coconino	0	0	2	67	0	0	1	33	0	0	3.33
Pinal	0	0	2	22	1	11	6	67	0	0	2.56
Roosevelt	0	0	9	100	0	0	0	0	0	0	4.00
Tri-County	0	0	6	67	2	22	1	11	0	0	3.56
Total	0	0	19	63	3	10	8	27	0	0	3.37

TABLE V

LEARNER ATTITUDE TOWARDS UNIT
(NUMBER, PERCENT AND MEAN OR COMPOSITE
LEARNER ATTITUDE RESPONSES)

	YES/HAPPY		I DON'T CARE/OK		NO/SAD		
PROJECT	N	%	N	%	N	%	MEAN
Coconino	74	38	93	47	29	15	2.23
Pinal	226	57	135	34	37	9	2.47
Roosevelt	391	55	169	24	153	21	2.33
Tri-County	302	55	208	38	39	7	2.48
Total	993	53	605	33	258	14	2.40

LEARNER PERFORMANCE

In order to examine learners' performance on the unit, and to assess how well the objectives of the unit are met, cumulative scores over all the lesson items within the unit (total learner scores) were examined. Table VI presents the total learner scores in percentages by projects. This score reflects the unit's overall success concerning delivery of its objectives.

The scores from each project range from a low of 72% at Coconino to a high of 88% at Final. These responses appear uniform with no one project varying far from the mean score (83%) thereby exerting a disproportionate influence.

Various other data was collected from the teachers involved in the field test of the units.

The data collected included the following information:

1. Teachers indicated whether they had experience in jobs other than teaching and whether this information helps in teaching the unit. It was found that 8 of the 10 teachers (80%) had previous experience in a job other than teaching. Of these eight, seven indicated that the previous experience helped in teaching the unit (Tables VII and VIII).

TABLE VI

NUMBER AND PERCENT OF CORRECT LEARNER RESPONSES TO LESSON IMBEDDED ITEMS FOR A GIVEN UNIT

PROJECT	NUMBER OF RESPONSES	NUMBER OF CORRECT RESPONSES	PERCENT OF CORRECT RESPONSES
Coconino	111	80	72
Pinal	217	190	88
Roosevelt	366	311	85
Tri-County	328	271	83
Total	1022	852	83

TABLE VII

NUMBER AND PERCENT OF INSTRUCTORS THAT TAUGHT EACH UNIT BY OCCUPATION OTHER THAN TEACHING

PROJECT	SOCIAL SCIENCE		PHYSICAL SCIENCES		CHEMICAL SCIENCES		BUSINESS		TECHNI-CAL		CONSTRUC-TION		INDUSTRY		OTHER		NONE		TOTAL NO.
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Coconino	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	100	1
Pinal	0	0	0	0	0	0	0	0	0	0	2	67	0	0	1	33	0	0	3
Roosevelt	0	0	0	0	0	0	1	33	1	33	0	0	1	33	0	0	0	0	3
Tri-County	0	0	0	0	0	0	0	0	0	0	1	33	0	0	1	33	1	33	3
Total	0	0	0	0	0	0	1	10	1	10	3	30	1	10	2	20	2	20	10

TABLE VIII

NUMBER AND PERCENT OF INSTRUCTORS THAT TAUGHT EACH UNIT BY WHETHER PREVIOUS EXPERIENCE HELPS IN CAREER EDUCATION

PROJECT	YES N	YES %	NO N	NO %	NO PREVIOUS EXPERIENCE N	NO PREVIOUS EXPERIENCE %	TOTAL NUMBER
Coconino	0	0	0	0	1	100	1
Pinal	2	67	1	33	0	0	3
Roosevelt	3	100	0	0	0	0	3
Tri-County	2	67	0	0	1	33	3
Total	7	70	1	10	2	20	10

2. The teachers were asked how many guest speakers they used. Seven of the 10 teachers (70%) did not use guest speakers. A total of 8 guest speakers were used in the 10 classrooms. (Table IX)

3. The teachers were also asked to indicate the amount of time devoted to the unit per week and what time of day (AM or PM) the unit was primarily taught. The median number of hours spent per week teaching the unit fell between 2-3 hours. Four (40%) teachers taught the unit in the afternoon while 6 (60%) taught the unit in the morning. (Tables X and XI)

4. The teachers were also asked what kind of classroom or method of teaching they used. Eight (80%) of the classrooms were self-contained, and two (20%) were open classrooms. (Table XII)

Correlations were calculated between the above data and Student Attitude, Teacher Attitude and Student Performance. No significant correlations were found.

TABLE IX

NUMBER AND PERCENT OF INSTRUCTORS THAT TAUGHT EACH UNIT BY THE NUMBER OF GUEST SPEAKERS USED

	0		1		2		3		4		
PROJECT	N	%	N	%	N	%	N	%	N	%	TOTAL NUMBER
Coconino	1	100	0	0	0	0	0	0	0	0	1
Pinal	2	67	0	0	1	33	0	0	0	0	3
Roosevelt	2	67	0	0	0	0	1	33	0	0	3
Tri-County	2	67	0	0	0	0	1	33	0	0	3
Total	7	70	0	0	1	10	2	20	0	0	10

TABLE X

NUMBER AND PERCENT OF INSTRUCTORS THAT TAUGHT EACH UNIT
BY AMOUNT OF TIME DEVOTED TO THE UNIT EACH WEEK

PROJECT	LESS THAN 1 HR. N	%	1-2 HRS. N	%	2-3 HRS. N	%	3-5 HRS. N	%	MORE THAN 5 HRS. N	%	TOTAL NUMBER
Coconino	0	0	0	0	0	0	1	100	0	0	1
Pinal	0	0	1	33	0	0	1	33	1	33	3
Roosevelt	0	0	0	0	2	67	1	33	0	0	3
Tri-County	0	0	2	67	0	0	1	33	0	0	3
Total	0	0	3	30	2	20	4	40	1	10	10

TABLE XI

NUMBER AND PERCENT OF INSTRUCTORS THAT TAUGHT EACH UNIT BY TIME TAUGHT

PROJECT	AM N	AM %	PM N	PM %	TOTAL NUMBER
Coconino	0	0	1	100	1
Pinal	1	33	2	67	3
Roosevelt	2	67	1	33	3
Tri-County	3	100	0	0	3
Total	6	60	4	40	10

TABLE XII

NUMBER OF INSTRUCTORS THAT TAUGHT EACH UNIT
BY TYPE OF CLASSROOM AND METHOD OF TEACHING

PROJECT	OPEN CLASSROOM N	%	SELF CONTAINED N	%	TEAM TAUGHT N	%
Coconino	0	0	1	100	0	0
Pinal	1	33	2	67	0	0
Roosevelt	0	0	3	100	0	0
Tri-County	1	33	2	67	0	0
Total	2	20	8	80	0	0

TEACHER REFINEMENT, ANALYSIS AND COMMENTS

Specific revision data was obtained by asking the field test teachers to make comments regarding each lesson taught. These comments were solicited in the UNIVAL.

The following list represents a composite of teacher comments regarding the various aspects of the unit, as well as a lesson by lesson critique of the unit. These comments have been analyzed and recommendations for revision presented.

TEACHER COMMENTS

When reading the teacher comments it should be noted that not all teachers respond to the open ended items. Therefore, some of the responses seem inconsistent with the teacher responses to the closed items. The closed items, it is felt, reflect a true attitude toward the unit over the teachers sampled. The teacher comments are from selected teachers that felt strongly enough to take the opportunity to respond. The comments are, therefore, more for curriculum refinement than for overall evaluation of the unit.

Coconino: Teacher and students enjoyed the unit. The only problem was the students were weak in math fundamentals.

Pinal: Geared to students on 7th grade level. Didn't really show the need for math. Metric unit needs to be taught first.

Roosevelt: Need more time for metrics. Enjoyed unit. Well received by students. Introduction to metric system needed. Probably would be more relevant on 8th grade level.

Tri-County: Good unit -- indicates importance of math. Doesn't really relate to those not interested in construction.

SUMMARY

The relevant data collected during the field test is summarized below:

1. A total of 402 learners were exposed to this unit in 4 of the 9 participating projects. Fifty-three percent of the learners were male and 50% representatives of minority backgrounds.
2. Of the 10 teachers that presented the unit 8 were male, the median years of experience was between 1-5 years, and 5 had taught or developed career education material.
3. Teachers expressed a very positive attitude toward career education in general (4.20 on a scale where 5 was the highest positive response). Though still positive, the teachers' attitude toward this particular unit was quite a bit lower (3.37).
4. The learners also exhibited a slightly positive attitude toward the unit with 53% of the 1856 responses positive, 33% no opinion, and 14% negative.

5. The learners' overall performance was high (83% correct). There was very little variability across lessons and units.
6. A list of the teachers critical comments and recommendations was presented in the body of this report.

CONCLUSIONS AND RECOMMENDATIONS

1. Future users of this unit should review the unit in its entirety paying particular attention to the content of each activity noting when during their teaching year it is best to be taught.
2. During installation the teachers, while not constrained by field testing, should be made aware that the lessons as presented are only suggestions and may be modified, resequenced, augmented or reduced as desired.
3. This unit presents a wide range of activity suggestions, many of which may be extracted to constitute an enrichment program in addition to the unit.
4. Learner Attitude (2.40) and Teacher Attitude (3.37) are quite low for this unit. However, Student Performance is a moderately high 83%. It is recommended, however, that this unit be included in the implementation phase of curriculum development. Even though teacher and learner attitudes are low, they are still positive.

APPENDIX I

Additional Data

Mean Instructor Attitude Toward the Unit by Mean Learner Attitude

Project	Teacher #	Instructor Unit Attitude	Learner Attitude
Coconino	1	3.33	2.23
Pinal	1	2.00	-
	2	3.33	2.47
	3	2.33	-
Roosevelt	1	4.00	2.01
	2	4.00	1.78
	3	4.00	2.64
Tri-County	1	3.67	2.44
	2	3.67	2.52
	3	3.33	2.48

$r = 0.39$

Mean Student attitude by Time of Day Unit Taught

Project	Teachers	Student Attitude	Time of day 1=PM 2=AM
Coconino	1	2.23	2
Pinal	1	-	2
	2	2.47	1
	3	-	1
Roosevelt	1	2.01	2
	2	1.78	1
	3	2.64	2
Tri-County	1	2.44	2
	2	2.52	2
	3	2.48	2

r = 0.46

Mean Learners Performance on a Unit by Mean Instructor Attitude Toward the Unit

Project	Teacher #	*Learner Performance	Unit Attitude
Coconino	1	72	3.33
Pinal	1	-	2.00
	2	88	3.33
	3	-	2.33
Roosevelt	1	86	4.00
	2	74	4.00
	3	91	4.00
Tri-County	1	77	3.67
	2	70	3.67
	3	95	3.33

r = 0.07

*Percent of students attaining unit objectives

Mean Instructor Attitude Toward The Unit by Instructor Attitude Toward Career Education

Project	Teacher #	Instructor Unit Attitude (ques.3-5)	Instructor Attitude Career Ed. (ques.1,2)
Coconino	1	3.33	4.00
Pinal	1	2.00	3.00
	2	3.33	3.00
	3	2.33	4.50
Roosevelt	1	4.00	5.00
	2	4.00	5.00
	3	4.00	4.50
Tri-County	1	3.67	4.00
	2	3.67	4.00
	3	3.33	4.50

$r = 0.55$

Mean Student Performance by Time of Day Unit Taught

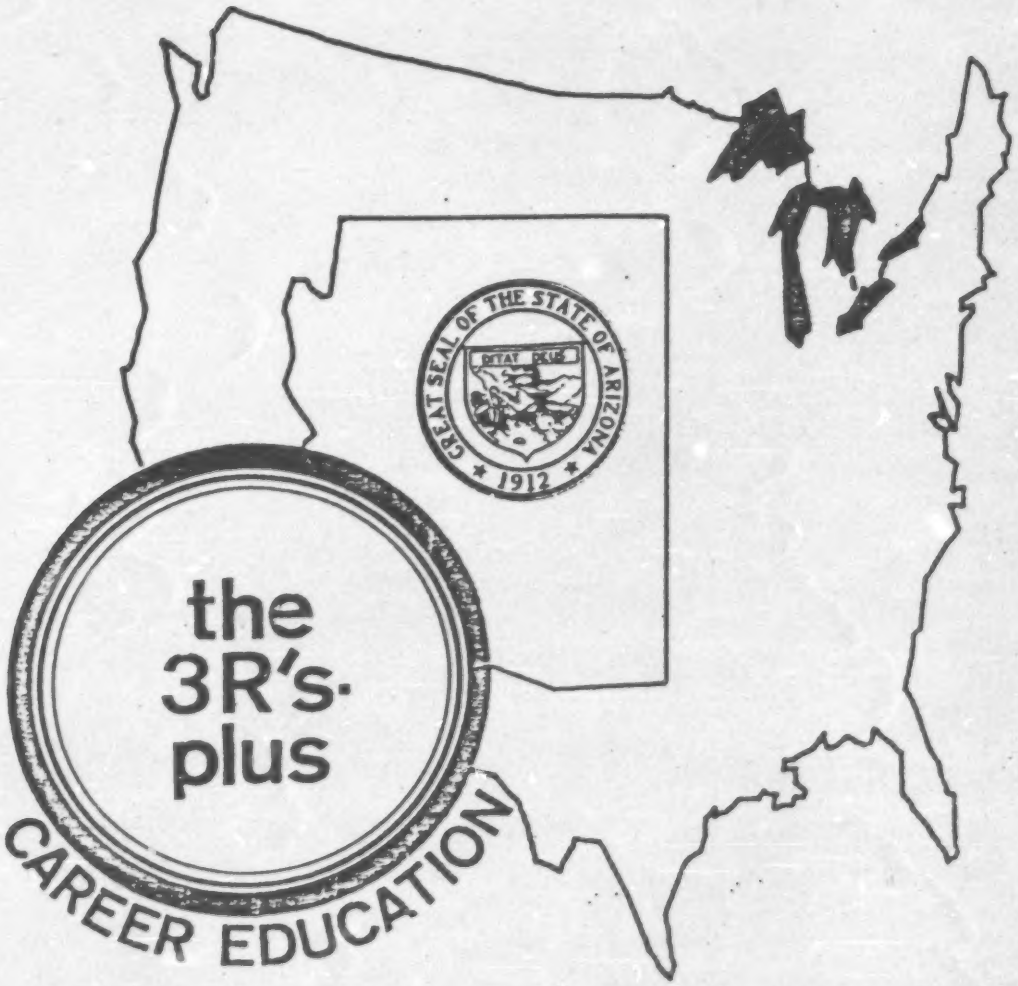
Project	Teacher #	*Learner Performance	Time of day 1=pm 2=am
Coconino	1	72	1
Pinal	1	-	2
	2	88	1
	3	-	1
Roosevelt	1	86	2
	2	74	1
	3	91	2
Tri-County	1	77	2
	2	70	2
	3	95	2

r = 0.32

*Percent of students attaining unit objectives

APPENDIX II

UNIVAL



Unit Evaluation
UNIVAL

CONSTRUCTION INDUSTRY RELATED MATHEMATICS

GRADE LEVEL: 7

PART I

CAREER EDUCATION FIELD TEST
PROGRAM INFORMATION

Please print:

Instructor_____ School_____

Unit or Kit Title_____ District_____

Grade Level_____ Project_____

Date unit or Kit introduced in the classroom____/____/____
mo. day year

Student data: (*the numbers should agree)

*Total number of students exposed to the unit_____

*Number of students of each sex: a. male____ b. female____

*Number of students in each ethnic group:

a. American Indian____ d. Anglo White____

b. Black____ e. Other____

c. Spanish Surname____

DIRECTIONS: Circle the letter of your answer in each of the following questions.

Teachers:

How many years have you worked in the field of education?

a. Less than one d. 11-15 years

b. 1-5 years e. More than 15 years

c. 6-10 years

Which of the following would best describe your exposure to Career Education (to date)? I have:

a. Developed a Career Education unit or program

b. Taught a Career Education unit or program

c. Read a Career Education unit or program

d. Had some exposure to Career Education

e. Had no exposure to Career Education

What is your sex?

a. Male____

b. Female____

Is your classroom: (more than one answer may be applicable)

a. Open____

b. Self-contained____

c. Team taught

What time of day were the lessons taught (predominantly)?

a. AM____

b. PM____

How much time did you devote to the unit each week?

a. Less than 1 hour

b. 1-2 hours

c. 2-3 hours

d. 3-5 hours

e. More than 5 hours

How many guest speakers were used in conjunction with the unit?

a. 0

b. 1

c. 2

d. 3

e. 4 or more

Have you had another occupation other than teaching?

a. Social sciences

b. Physical sciences

c. Chemical sciences

d. Business

e. Technical

f. Construction

g. Industry

h. _____

Did this experience help in teaching the Career Education unit?

a. Yes

b. No

PART II

Learner Performance Data

Directions: Please provide an indication of how well the lessons delivered the performance objectives. The lesson numbers and methods of evaluation for each have been indicated. Page numbers, objective specifications, and item numbers are indicated as appropriate. Please indicate the total number of learners responding. Then record the number that responded correctly. Complete this form as you teach each lesson of the unit.

		Method of Evaluation			Number of Learners	
Lesson Number	Page No. Item No.	Test	Checklist	Instructor Judgment	Responding	Responding Correctly
1	1.1.1.1					
						Minimum of 5 included
2	1.2.1.1					
						Minimum of 8 correct
3	1.3.1.1					
						Minimum of 28 correct
4	1.4.1.1					

Construction Industry Related Mathematics
Grade Level 7

PART III

Instructor Attitudinal Data

Directions: Read each statement and place a check in the box under the heading that describes your response.

		Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
1.	Classes in my subject grade level would be more meaningful and relevant if focused around Career Education objectives.					
2.	Career Education is just another fad that will soon be forgotten.					
3.	After minimal revisions this unit will be ready for statewide distribution.					
4.	The learning activities were very effective in helping meet the performance stated.					
5.	The content of the unit relates directly to my regular class program.					

Indicate below any further comments concerning the strengths or weaknesses of the unit.

PART III (Continued)

Learner Attitudinal Data

On the following page is an attitudinal survey which we would like your learners to respond to. Please remove that page from this instrument and reproduce enough copies for each of your learners. We feel that it would be best if your learners responded to this survey at the completion of the unit. If your learners do not have the needed reading ability to complete the survey, please read and explain the items to them. After the learners have completed the survey, please tally their responses and record the total number of learners responding in each manner of the form provided below.

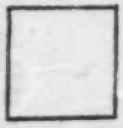
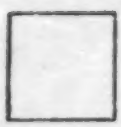
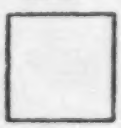
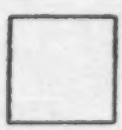
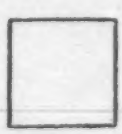
	YES	I DON'T CARE	NO
1.			
2.			
3.			
4.			

	HAPPY	OK	SAD
5.			
6.			
7.			

PART III (cont'd)

LEARNER ATTITUDINAL FORM

NAME _____

	YES	I DON'T CARE	NO
1. Would you want to know more about what we have learned in these lessons?			
2. Do you know more now about these lessons than before?			
3. Were the lessons interesting to you?			
4. Do you think that next year's class should be given these lessons?			
	HAPPY	OK	SAD
5. How did you feel about the lessons?			
6. How did most of your other classmates feel about the lessons?			
7. How did your teacher feel about the lessons?			

13.